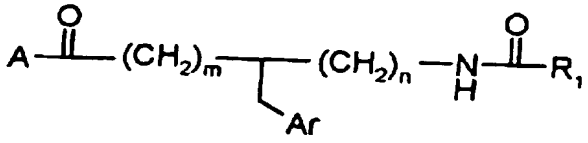
Amendments to the Claims

Please amend the listing of claims as follows:

1. (Original) A compound of structural formula (I):



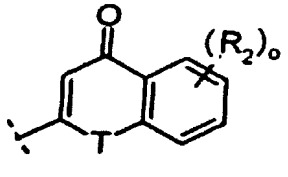
(I)

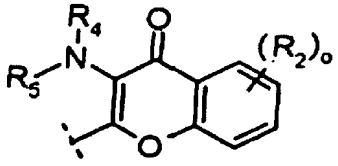
or a pharmceutically acceptable salt or a solvate thereof, wherein

Ar is:

aryl or heteroaryl which may both be substituted;

R_1 is:





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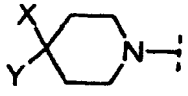
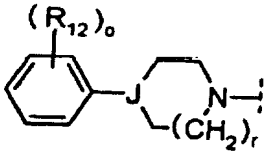
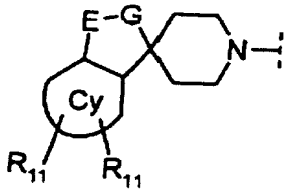
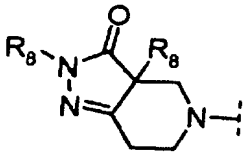








R_2 is independently:

hydrogen,

halo,

alkyl,

haloalkyl,

hydroxy,

alkoxy,

S-alkyl,

SO_2-alkyl,

O-alkenyl,

S-alkenyl,

$NR_{14}C(O)R_{14}$,

$NR_{14}SO_2R_{14}$,

$N(R_{14})_2$,

(D)-cycloalkyl,

(D)-aryl,

(D)-heteroarl,

(D)-heterocyclyl (wherein heterocyclyl excludes a heterocyclyl containing a single nitrogen), and

wherein aryl, heteroaryl, heterocyclyl, alkyl and cycloalkyl are substituted or unsubstituted, and two adjacent R_2 may form a 4- to 7-membered ring;

R_4 and R_5 are each independently:

hydrogen,

alkyl or

(D)-cycloalkyl, or

R_4 and R_5 together with the nitrogen to which they are attached form a 5- to 8-membered ring,

wherein alkyl and cycloalkyl are unsubstituted or substituted;

R_8 is independently:

hydrogen,

alkyl,

(D)-aryl or

(D)-cycloalkyl;

R_9 is independently:

hydrogen,

alkyl,

(D)-aryl,

(D)-heteroaryl or

(D)-cycloalkyl;

R_{10} is independently:

R_9,

(D)-heterocyclyl,

(D)-$N(Y)_2$,

(D)-NH-heteroaryl or

(D)-NH-heterocyclyl,

wherein aryl, heteroaryl, alkyl, D, cycloalkyl and heterocyclyl are substituted or unsubstituted, or

two R_{10} groups together with the atoms to which they are attached form a 5- to 8-membered mono- or bi-cyclic ring system;

R_{11} is:

hydrogen,

halo,

alkyl,

alkoxy,

C≡N,

CF_3 or

OCF_3;

R_{12} is independently:

hydrogen,

hydroxy,

cyano,

nitro,

halo,

alkyl,

alkoxy,

haloalkyl,

(D)-$C(O)R_{14}$,

(D)-$C(O)OR_{14}$,

(D)-$C(O)SR_{14}$,

(D)-C(O)-heteroaryl,

(D)-C(O)-heterocyclyl,

(D)-$C(O)N(R_{14})_2$,

(D)-$N(R_{14})_2$,

(D)-$NR_{14}COR_{14}$,

(D)-$NR_{14}CON(R_{14})_2$,

(D)-$NR_{14}C(O)OR_{14}$

(D)-$NR_{14}C(R_{14})=N(R_{14})$,

(D)-$NR_{14}C(=NR_{14})N(R_{14})_2$,

(D)-$NR_{14}SO_2R_{14}$,

(D)-$NR_{14}SO_2N(R_{14})_2$,

(D)-NR_{14}(D)-heterocyclyl,

(D)-NR_{14}(D)-heteroaryl,

(D)-OR_{14},

OSO_2R_{14},

(D)-$[O]_q$(cycloalkyl),

(D)-$[O]_q$(D)aryl,

(D)-$[O]_q$(D)-heteroaryl,

(D)-$[O]_q$(D)-heterocyclyl (wherein heterocyclyl excludes a heterocyclyl containing a single nitrogen when q=1),

(D)-SR_{14},

(D)-SOR_{14},

(D)-SO_2R_{14} or

(D)-$SO_2N(R_{14})$,

wherein alkyl, alkoxy, cycloalkyl, aryl, heterocyclyl and heteroaryl are substituted or unsubstituted;

R_{14} is independently:

hydrogen,

alkyl,

haloalkyl,

(D)-cycloalkyl,

(D)-phenyl,

(D)-naphthyl,

(D)-heteroaryl,

(D)-heterocyclyl (wherein heterocyclyl excludes a heterocyclyl containing a single nitrogen), and

wherein phenyl, naphthyl, heteroaryl, heterocyclyl, alkyl and cycloalkyl are substituted or unsubstituted;

X is:

alkyl,

(D)-cycloalkyl,

(D)-aryl,

(D)-heteroaryl,

(D)-heterocyclyl,

(D)-C≡N,

(D)-$CON(R_9R_9)$,

(D)-CO_2R_9,

(D)-COR_9,

(D)-$NR_9C(O)R_9$,

(D)-$NR_9CO_2R_9$,

(D)-$NR_9C(O)N(R_9)_2$,

(D)-$NR_9SO_2R_9$,

(D)-$S(O)_pR_9$,

(D)-$SO_2N(R_9)(R_9)$,

(D)-OR_9,

(D)-$OC(O)R_9$,

(D)-$OC(O)OR_9$,

(D)-$OC(O)N(R_9)_2$,

(D)-$N(R_9)(R_9)$ or

(D)-$NR_9SO_2N(R_9)(R_9)$,

wherein aryl, heteroaryl, alkyl, D, cycloalkyl and heterocyclyl are unsubstituted or substituted;

Y is:

hydrogen,

alkyl,

(D)-cycloalkyl,

(D)-aryl,

(D)-heterocyclyl or

(D)-heteroaryl,

wherein aryl, heteroaryl, alkyl, D and cycloalkyl are unsubstituted or substituted;

Cy is benzene, pyridine or cyclohexane;

D is a bond or alkylene;

E is $CHCO_2Y$, $CHC(O)N(Y)_2$, NSO_2R_{10}, $CHN(Y)COR_{10}$, $CHN(Y)SO_2R_{10}$, $CHCH_2OY$ or $CHCH_2$heteroaryl;

G is D, CH-alkyl, O, C=O or SO_2, with the proviso that when G is O, the ring atom E is carbon;

J is N or CH;

T is O;

n is 0 - 2;

m is 0 - 2;

o is 0 - 3;

p is 0 - 2;

q is 0 or 1;

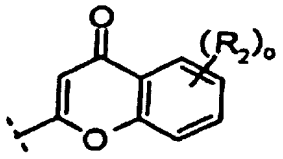
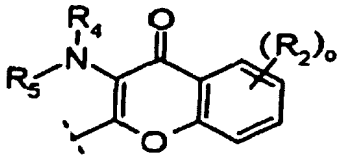
r is 1 or 2.

2. (Original) The compound of claim 1, wherein

Ar is:

aryl which may be substituted with one to three substituents independently selected from the group consisting of cyano, nitro, perfluoroalkoxy, halo, alkyl, (D)-cycloalkyl, alkoxy and/or haloalkyl;

R_1 is:

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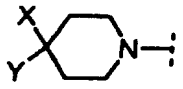
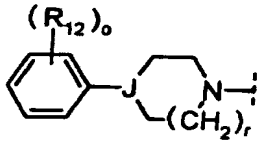
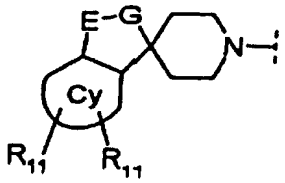
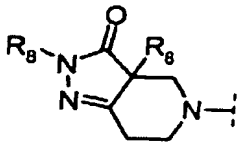





R_2 is independently:

hydrogen,

hydroxy,

halo,

alkyl,

alkoxy,

S-alkyl,

SO_2-alkyl,

O-alkenyl,

S-alkenyl,

haloalkyl or

(D)-cycloalkyl;

R_4 and R_5 are each independently:

hydrogen,

alkyl or

cycloalkyl, or

R_4 and R_5 together with the nitrogen to which they are attached form a 5- to 7-membered ring which may contain an additional heteroatom selected from O, S and NR_6;

R_6 is independently:

hydrogen,

alkyl,

C(O)alkyl,

(D)-aryl or

(D)-cycloalkyl;

R_8 is independently:

hydrogen,

alkyl or

(D)-aryl;

R_9 is independently:

hydrogen,

alkyl or

(D)-cycloalkyl;

R_{10} is R_9;

R_{11} is:

hydrogen,

halo,

alkyl,

alkoxy or

C≡N;

R_{12} is independently:

hydrogen,

hydroxy,

cyano,

nitro,

halo,

alkyl,

alkoxy,

haloalkyl,

(D)-C(O)-heterocyclyl,

(D)-$C(O)N(R_{14})_2$,

(D)-$N(R_{14})_2$,

(D)-$NR_{14}COR_{14}$,

(D)-$NR_{14}CON(R_{14})_2$,

(D)-$NR_{14}C(O)OR_{14}$

(D)-$NR_{14}C(R_{14})=N(R_{14})$,

(D)-$NR_{14}C(=NR_{14})N(R_{14})_2$,

(D)-$NR_{14}SO_2R_{14}$ or

(D)-$NR_{14}SO_2N(R_{14})_2$;

R_{14} is independently:

hydrogen,

halo,

alkyl,

(D)-cycloalkyl,

alkoxy or

phenyl;

X is:

alkyl,

(D)-cycloalkyl,

(D)-aryl,

(D)-heteroaryl,

(D)-heterocyclyl,

(D)-NHC(O)R_9,

(D)-CO_2R_9 or

(D)-CON(R_9R_g);

Y is:

hydrogen,

alkyl,

(D)-cycloalkyl,

(D)-aryl,

(D)-heterocyclyl or

(D)-heteroaryl;

Cy is benzene or pyridine;

D is a bond or C_1 - C_4-alkylene;

E is NSO_2R_{10} CHN(Y)COR_{10} or CHN(Y)SO_2R_{10};

G is D or CH-alkyl;

J is N or CH;

n is 0 or 1;

m is 0 or 1;

o is 0, 1 or 2;

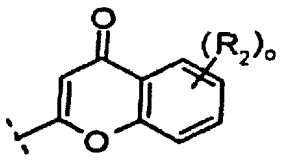
r is 1.

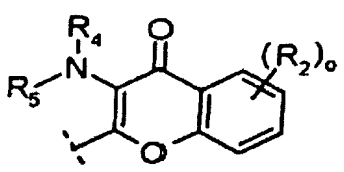
3. (Currently Amended) The compound of claim 1 ~~or 2~~, wherein

Ar is:

phenyl or naphthyl which may be substituted with one or two substituents independently selected from the group consisting of halo, alkyl, alkoxy and/or haloalkyl;

R_1 is:





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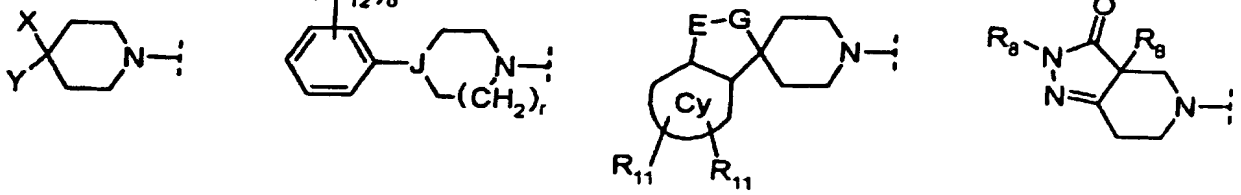

R_2 is independently:

hydrogen,

hydroxy,

alkoxy,

S-alkyl,

SO_2-alkyl,

O-alkenyl,

S-alkenyl,

halo or

alkyl;

R_4 and R_5 are each independently:

hydrogen or

akyl, or

R_4 and R_5 together with the nitrogen to which they are attached form a 5- to 6-membered ring optionally containing an additional oxygen atom;

R_6 is hydrogen;

R_8 is independently:

alkyl or

(D)-aryl;

R_9 is alkyl;

R_{10} is R_9;

R_{11} is:

hydrogen,

halo and

C_1 - C_4-alkyl;

R_{12} is independently:

cyano,

nitro,

halo,

alkyl,

(D)-C(O)-heterocyclyl,

(D)-$N(R_{14})_2$,

(D)-$NR_{14}COR_{14}$,

(D)-$NR_{14}CON(R_{14})_2$,

(D)-$NR_{14}C(O)OR_{14}$ or

(D)-$NR_{14}SO_2R_{14}$;

R_{14} is independently:

hydrogen,

halo,

alkyl,

alkoxy or

phenyl;

X is:

Alkyl,

(D)-cycloalkyl,

(D)-heterocyclyl,

(D)-$NHC(O)R_9$ or

(D)-$CON(R_9R_9)$;

Y is:

hydrogen,
alkyl,
(D)-cycloalkyl or
(D)-heterocyclyl;

Cy is benzene;
D is a bond or CH_2;
E is NSO_2R_{10};
G is D;
J is N or CH;
n is 0;
m is 0;
o is 0 or 1;
p is 0, 1 or 2;
q is 0 or 1 ;
r is 1.

4. (Currently Amended) ~~The compound of any of claims 1 to 3 for use as a~~ A medicament comprising the compound of claim 1.

5. (Currently Amended) ~~Use of the compound of any of claims 1 to 3 for the preparation of a medicament for the treatment or prevention of~~ A method of treating or preventing disorders, diseases or conditions responsive to the modulation of the melanocortin-4 receptor in a mammal, where modulation means activation in the case of MC4-R agonists or inactivation in the case of MC4-R antagonists, the method comprising administering an effective amount of a compound of claim 1.

6. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of cancer cachexia.~~ A method of treating or preventing cancer cachexia, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

7. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of muscle wasting.~~ A method of treating or preventing muscle wasting, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

8. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of anorexia.~~ A method of treating or preventing anorexia, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

9. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of anxiety and/or depression.~~ A method of treating or preventing anxiety and/or depression, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

10. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of obesity.~~ A method of treating or preventing obesity, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

11. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of diabetes mellitus.~~ A method of treating or preventing diabetes mellitus, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

12. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of male or female sexual dysfunction.~~ A method of treating or preventing male or female sexual dysfunction, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

13. (Currently Amended) ~~Use of MC4-R antagonists according to claims 5 for the preparation of a medicament for the treatment or prevention of erectile dysfunction.~~
A method of treating or preventing erectile dysfunction, the method comprising administering to a human or mammal an effective amount of the MC4-R antagonists according to claim 5.

14. (Currently Amended) A pharmaceutical composition which comprises a compound of ~~any of claims 1 to 3~~ claim 1 and a pharmaceutically acceptable carrier.